

Serial No. 10/657,874

RD-29,557-4

LISTING of CLAIMS

1-12. (Canceled)

13. (Currently amended) A spectroscopic solvent vapor sensor for identifying siloxane solvent vapor, the sensor comprising:

~~The solvent vapor sensor of claim 11 wherein said solvent vapor sensor comprises~~

an infrared source to generate infrared radiation; and

an infrared sensor, the infrared sensor selectively responsive to siloxane absorbance of infrared radiation having wavelengths in a near or mid-infrared range.

14. (Canceled)

15. (Currently amended) A piezo-based solvent vapor sensor for identifying siloxane solvent vapor, the sensor comprising:

~~The solvent vapor sensor of claim 11 wherein said solvent vapor sensor comprises~~

a quartz crystal microbalance sense element including a transducer film that selectively absorbs the siloxane solvent vapor.

16. (Original) The solvent vapor sensor of claim 15 wherein said transducer film comprises a non-polar polymer.

17. (Original) The solvent vapor sensor of claim 16 wherein said transducer film comprises a hydrocarbon chain.

18. (Currently amended) A strain based solvent vapor sensor for identifying siloxane solvent vapor, the sensor comprising:

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~~The solvent vapor sensor of claim 11 wherein said solvent vapor sensor comprises~~

a piezo-resistive circuit; and

a sensing element coupled to the piezo-resistive circuit, the sensing element including a transducer film.

19. (Currently amended) The strain based solvent vapor sensor of claim 18 wherein said transducer film comprises a non-polar polymer.

20. (Currently amended) The strain based solvent vapor sensor of claim 18 wherein said transducer film comprises a hydrocarbon chain.

21. (Canceled)

22. (New) The spectroscopic solvent vapor of claim 13, wherein the infrared sensor is responsive to siloxane absorbance of infrared radiation having wavelengths between about 2300nm and about 2500nm.

23. (New) The spectroscopic solvent vapor of claim 13, wherein the infrared sensor is responsive to siloxane absorbance of infrared radiation having wavelengths of about 9200nm.